Ethnography, death and disease: Moving towards a more holistic practice

Sarah-Louise Decrausaz

Department of Archaeology and Anthropology
University of Cambridge
sld75@cam.ac.uk

Introduction

Biological anthropologists study human skeletal remains to gain information on demography, diet, disease, warfare and the biological relationships between people (Springer 2006). The study of disease in past populations is recognized as a specialism within biological anthropology that has arisen alongside medical training and interest in bone histology (Waldron 2009). Even with multidisciplinary aims and backgrounds, the examination of skeletal remains is sometimes isolated from a more holistic examination of the cultural, historical, social and economic factors that have contributed to the death of an individual. Approaching death from a purely scientific and medical perspective creates a personal distance for the researcher that enables the empirical analysis of human remains. Many medical practitioners make use of the doctor-centred model of communication, where the doctor provides data-driven consultations to passive patients, without an examination of the social and emotional aspects of their disease aetiology (De Valck et al. 2001). In contrast, medical anthropology works to understand individual meanings of disease, as well as the societal production and spread of different types of illness (Young 1982). Anthropological analyses of disease should illuminate the 'pathologies of power', where the influences of social inequality based on gender, ethnicity, socioeconomic class and religious beliefs on disease can be examined in detail and in historical context (Farmer 1999:1488).

However, students in biological anthropology are not always encouraged to understand the approaches of other disciplines within the sphere of anthropology, including perspectives on disease put forward by medical anthropology. The effect of this is twofold 1) biological anthropologists may not be encouraged to engage with multidisciplinary perspectives that include cultural factors on disease as cause of death, and 2) biological anthropologists may not engage with ancestral remains of indigenous populations in a respectful and holistic manner. This is not to suggest that all biological anthropologists are isolated from multidisciplinary perspectives on engaging with ancestors, as Van der Merwe et al. (2003) and Pfeiffer and Williamson (2003) have demonstrated that respectful, inclusive scientifically rigorous examinations of ancestral remains is possible.

Amongst many indigenous groups, relational ontologies define perceptions of death (Kakaliouras 2012). Students in biological anthropology are infrequently exposed to relational ontologies through formalized instruction, and as a result often struggle to reconcile an alternative to a medicalized perspective on death, as well as a medicalized perspective on disease. This may in turn affect their research conduct and scholarly products that arise from their contact with indigenous ancestral remains. For students focusing on human osteology, a greater emphasis on examining the social, cultural and historical effects on causes of death and disease in living indigenous populations would provide a sound basis for more holistic studies of indigenous ancestral remains.

Death and disease as medicalized

For both medical practitioners and biological anthropologists, cause of death and disease diagnosis are rather discrete events, isolated from an understanding of cultural and historical effects upon the person's lifetime. A medicalized discourse on the dead and those living with disease is produced by the exclusively medical decision on the moment of death or infection, as well as the active segregation of death and illness from quotidian existence. As a result of this, the social, political, economic and historical contexts in which death and disease take place may not be discussed. Anthropological approaches broaden and deepen the notion that high levels of socioeconomic inequality correlate with worsened health outcomes (and potential increase in specific diseases) across an entire society (Nguyen and Peschard 2003).

The influence of historical, political, economic and social factors on disease and death is particularly salient in enquiries into the health and causes of death of indigenous ancestors. Duran, Duran and Brave Heart (1998) outline the paradigm of intergenerational or historical trauma to explain part of the health issues that have affected Native American communities. The death of key elders who possessed medicinal, historical and personal knowledge through warfare, as well as the systematic removal of subsistence economies, ejection from communal territories, and subsequent assaults on language and identities are only a few examples of the trauma of the colonial process (Duran, Duran, Brave Heart 1998). The arrival of new diseases and pathogens with colonial forces is another crucial factor to consider in the trauma of colonialism.

Evidence of the interaction between social inequalities through colonial action are not invisible on skeletal remains. Subadult trauma increased after contact with Spanish colonial forces in Puruchuco-Huaquerones (Peru) (Gaither and Murphy 2012), whilst amongst the Mochica in Mórrope (Peru) skeletal remains show evidence of growth faltering, increased porotic hyperostosis and periosteal inflammation concomitant with European contact (Klaus and Tam 2009). Rathbun (1987) examined the skeletal remains of African-American slaves from a South Carolina plantation between the years 1840 and 1870, finding evidence of childhood metabolic stress in the form of linear enamel hypoplasia and Harris lines, as well as indicators of anaemia and hard physical labour. In addition, many resting places of ancestral remains were desecrated for the collection of scientific data on human anatomy and its relationship to evolution. Professors and their students in the past considered the remains of indigenous peoples "as specimens" (Riding In 1996:245). Indigenous ancestral remains became, as Deloria (1969:95) described, a "reduction of people to ciphers for purposes of observation." Aleš Hrdlička's excavation of indigenous burial sites across Kodiak Island, Alaska, allowed Hrdlička to connect his observations of differences in skeletal morphology in different groups living on the island to the fact that some were "simpler, cruder people than their predecessors on the island, less rich and artistic" (Hrdlička 1994:433).

Repeated generational cycles of discrimination have been found to disproportionately affect certain communities, such as the disparity in cardiovascular disease prevalence amongst African-Americans compared to White Americans (Kuzawa and Sweet 2009). Whilst the responses of phenotypic plasticity to spe-

cific socio-biological environments are essential to consider here, racial compared to genetic differences in disease response and prevalence should not be conflated (Goodman 2000). The monolith of colonialism and its relationship to epidemic disease should be tempered with an understanding of localized factors and the specific context in which epidemics occurred, prompting some scholars to describe epidemic diseases throughout colonialism as a "patchwork affair" (Larsen 1994).

A person is made of both the physical and the emotional, though a biological anthropologist examines only the physical components of a person, and how these are reflective of the broader environment within which this person existed. A biological anthropologist works within a framework created by the boundaries of osteological evidence (White and Folkens 2000), drawing attention to the potential limitations of methodology and working within cautious interpretation. In such analyses, whilst attempting to balance scientific and spiritual evidence in osteological enquiry, scientific evidence takes precedence (White and Folkens 2000). These analyses make use of a framework used by medicine, which privileges the notion that the dead body becomes an object for both understanding and examining the living (Crossland 2009). Armelagos and Van Gerven (2003:53) suggest that skeletons, "represent answers, and the goal of osteology is to frame the questions". Skeletal elements, in their obdurate physicality "transcend time, making the past immediately present" (Krmpotich et al. 2010:377). For this reason, bone is an ideal material for biological anthropologists to gain knowledge about past populations.

But with a singularly medicalized perspective on death, bones can be isolated from notions of individual identity. During the development of the discipline of anatomy, bones were characterized as "the most dry, cold and earthly" elements of the living body, bones having "only minimal, if any, sentience" (Hallam 2010:473). This medicalized perspective can isolate bones from any form of personhood and indeed the complexity of social and biological factors that contributed to the information that can be gained from examining skeletal remains. The examination of disease in the skeleton is hampered by the osteological paradox (Wood et al. 1992) and this can also obscure the cultural contributors of disease. Wood et al. (1992) outlined that though health or disease may be inferred from bony lesions or surface changes, these lesions often form over an extended period as a result of an immune response to a chronic condition. Skeletal remains lacking such lesions could be misin-

terpreted as healthy individuals, when they perhaps experienced an acute condition that did not result in an extended immune response. Such a dilemma demands a biocultural approach to skeletal evidence of disease in the past, including an understanding of historical, political and social impacts on disease.

The recent debate (Doyal and Muinzer 2011; Smith et al. 2011) on the treatment of the skeleton of Charles Byrne, the Irish Giant, encapsulates an interesting view on the position of diseased bodies within anatomical and anthropological learning, as well as questions of indigeneity. Charles Byrne's skeleton was acquired by the English anatomist John Hunter in 1783 and is currently displayed at the Hunterian Museum in London. Citing historical documents confirming Byrne's position and acknowledging the importance of the skeleton of Charles Byrne in more recent clinical research (Chahal et al. 2011), Doyal and Muinzer (2011) outline the wishes of Byrne in life to be buried at sea expressly to avoid his remains being acquired by Hunter, concluding that Byrne's wish should be fulfilled today. In response to this proposal, Smith et al. (2011) open their discussion stating "… the bones on display are not Charles Byrne's "body", but rather a part of it that retains the form of the whole in a way with which people can more readily engage, not least perhaps because a skull has a face." Neither publications make mention of the historical and cultural context in which Charles Byrne lived, which I believe to be a key component of Hunter's pursuit of Byrne's body. Irish people living under the British occupation of Ireland experienced social, cultural and economic marginalization as a result of the colonial process enacted in Ireland by British rule (An Ghaill 2001). It is likely that Byrne's Irish indigeneity played a large role in the objectification of this remains prior to his death, and may continue to play a role in this debate today.

Charles Byrne's case demonstrates that marginalized groups from across different parts of the globe (including European groups) were treated as opportunities for scientific and medical education. Highet (2005:420) explains that the remains and the bodies of those living in poverty, the transient and African-Americans were also commonly unearthed for the purpose of teaching anatomy or indeed as becoming part of medical collections. Arguably, a medicalized discourse on death was thus reiterated through an almost institutionalized notion that "those who were powerless in life have also found their bodies exploited in death" (Highet 2005:416). Separating the moment of death from life in medical prac-

tice allows those in power to impose this viewpoint upon others, and affects how the ancestral remains of (especially) the 'anthropological Other' are considered.

Disease, life and death–the importance of ethnography

The isolation of death and disease from a quotidian existence, from the greater effects of historical and ongoing inequality means that biological anthropologists may engage inadequately with relational notions of death and indeed causes of death. Social inequality manifests itself in disease, though it also manifests itself in social attitudes towards disease throughout time (Nguyen and Peschard 2003). The context in which disease can be treated overlays healthcare concerns for marginalized groups. Socioeconomic status, living in rural areas and methods of communication are some of the most important factors in healthcare access for North American, Australian and New Zealand indigenous populations (Marrone 2007). A clear understanding of relational ontologies around death, and the sociocultural parameters of healthcare for indigenous communities can be garnered from detailed ethnographic accounts. A robust four-field approach to training students not only in osteology, but also in techniques used by medical anthropologists and social anthropologists would engender a more holistic examination of ancestral remains.

Relationality is based on the principle that continuity exists between nature and culture. Natural and cultural reality are meshed together (Descola 2009:147), and interaction between humans and non-human living entities (which can include plants, animals, natural forms, objects and those who have died) occurs, which is meaningful on a social and spiritual level. Relational ontologies call for a rearrangement of Western notions of duality between body and mind, animality and humanity, immanence and transcendence, as well as the physical and the social (de Castro 1998:470). It demands an understanding of existence that goes beyond the perception of individual mind and body, and comes to mean a much larger connection with the community surrounding the individual, both human and non-human community. Relationality represents a connection with something beyond the self with less significant focus on the individual as the centre of experience (Glaskin 2012).

Relationality also embodies the equivalences made between a person and aspects of a person, such as hair, bone and name (Glaskin 2012:298). This

is in opposition to the objectification of aspects of a person that occurs with their death through the application of a medicalized perspective on death. The equivalences made between a person and aspects of that person also signify an expanded notion of identity beyond the mere physicality of a person. Aspects of a person are more fully connected to the places, ideas and cosmologies that have contributed to that person or to their lineage. Therefore, the definition of 'sacred' extends beyond the place where a person is interred, out to the places that have meaning to their community and personal lineage.

If relationality-oriented practices are not present in the way that they have been described in ethnographic accounts, indigenous identities may be fixed as Deloria's (1969:82) "shadows of a mythical super-Indian" instead of allowing for an indigenous identity that is constructed in a way that includes the realization of a colonial past, and potentially how that affects the present. Indigenous identities must not be essentialized through the presence or absence of certain practices, which may include the continued dialogue amongst those who have died and those who are still living.

An awareness of the multifaceted nature of indigenous identity and an exposure to relational ontologies can be established through an examination of the understanding of ancestral remains and disease treatment in indigenous communities found in ethnographic accounts. With this in mind, I will detail the relational ontologies pertaining to the ancestral remains in three different indigenous communities, as well as ethnographic accounts of disease and healthcare, and how the knowledge gained from these ethnographic accounts can lead to a more holistic engagement with ancestral remains and health amongst indigenous communities today.

Coast Salish, Canada

Amongst the Coast Salish groups, death is generally perceived as a process rather than a singular event (Joseph 1985:27). Hill-Tout's (1978) anthropological survey of a number of Coast Salish groups gives extensive descriptions of the cosmologies associated with mortuary customs in different Salish communities. The distinctiveness of this state results in different referential practices. The Chehalis use three distinct terms with which to refer to persons who have died. *Te smesteuqsetl* (the spirit people) are those who inhabit the Land of the Departed, whilst *selaauita* (the departed) is used primarily for those

who have just died and are in the process of leaving their bodies and moving to the world of the spirits. *Te spolakwets* (corpse, ghost) is either used to refer to a corpse or ghost, or another form of apparition of a person who has died (Hill-Tout 1978:106). The different referents for each element of the process of death is reflective of Coast Salish ontologies of death as a process rather than one event that obliquely ends the life of a person. Shamans were sought to aid with illnesses of a supernatural origin, though interestingly could be sought to also cause illnesses in others (Guilmet et al. 1991), speaking to communal connectedness between life, death, disease and other planes of existence.

Scholars examining health amongst Coast Salish communities speak of overall health amongst surveyed groups (Stephenson and Acheson 2004), though skeletal evidence of iron-deficiency anaemia has been noted (Cybulski 1977), as well as chronic bone infections due to treponematosis and tuberculosis (Cybulski 1990). Contact with colonial forces and the diseases brought into Northwest Coast indigenous communities resulted in abrupt and large-scale death amongst the Haida in particular. Smallpox had the greatest effect with three occasions of infection throughout the 1700s to 1800s, however influenza, whooping cough, measles and tuberculosis also affected communities significantly (Stephenson and Acheson 2004). Communities affected by smallpox in particular frequently fled the area in which the disease spread, resulting in changes to geographic distribution of surviving groups with later regrouping of particular communities, leading to significant sociocultural impact (Guilmet et al. 1991). Herbalists with ethno-biological knowledge frequently took on treatment of illnesses thought to have a human cause (Stephenson and Acheson 2004). Bark preparations continue to be used to treat respiratory ailments today amongst Salish communities today (Turner and Hebda 1990), as mortality from infectious diseases affecting the respiratory system are uncommonly high (Stephenson and Acheson 2004).

Kodiak Island and Baffin Island, Alaska and Arctic Canada

The indigenous groups of Kodiak Island consider the entirety of their community as one family, meaning that the death of any member of that community represents the death of a family member. Individualism has a far diminished currency than does a sense of the collective, including those who have died (Pullar 1994:19). Body stealing is a practice that is especially associated with the treatment of community members who have shown "wisdom and effective-

ness" (Hrdlička 1944:72). The bodies of persons who have died are frequently placed inside caves and other sacred places, sometimes covered with earth or wrapped in sea-lion skins. Prized possessions such as weaponry, canoes, clothing and food are often left with the person who has died, so that this person may use these possessions when they become an ancestral figure. These prized possessions are also left in the place of interment for family members as legacy. Those who are considered noteworthy in the community have their bodies stolen from their original place of interment and moved into caves. This circularity is also present in the sharing of both possessions left to specific family members, and the wider community at potlatch feasts (Hrdlička 1944).

Close social proximity through small dwellings and tightly-knit communities increased the rate of transmission of disease (Aaby 1984). Contact with European colonial groups for trading networks allowed for the transmission of disease to the Inuit groups of Baffin Island during the sixteenth to eighteenth centuries, the spread of which was intensified by the speed of dogsled technologies (McGhee 1994). Inuit populations were affected by the transmission of smallpox, influenza, measles, typhoid, syphilis, tuberculosis and a number of others according to historical records (McGhee 1994). Despite the introduction of these diseases, archaeological evidence does not suggest a large impact on population size for most Inuit communities (McGhee 1994). Vertebral developmental errors amongst the Thule-Historic ancestors of Canadian Inuit from Hudson Bay and the Sadlermuit communities from Coats Island suggests greater isolation in the Sadlermuit group (Merbs 2004), demonstrating that ongoing demographic change may be context-dependent.

Maori, New Zealand

Death is closely related to the *atua* (ancestral spirit group) of each Maori tribe. The *atua* of each tribe comprises memories of the ancestral lineage of each tribe, and thus the death of any tribal member must be considered amongst the collective of the *atua* group (Cowan 1910:109). The close connection of each member of a particular lineage is reflected in the treatment of those who have died, as they too must be placed with other members of their *atua*. To this end, people who have died are placed in a temporary place of burial, until the process of decomposition leaves only skeletal elements of the person. These bones are then cleaned through the *hahunga* (bone cleaning ceremony), and if

they are a person of special importance, placed in specially constructed caskets. Both the bones and caskets are then transported into sacred sepulchers, caves found in the mountainous areas of a tribe's territory. Each sepulcher is specific to an *atua,* meaning that in placing the corporeal aspects of a person with their lineage group, an *atua* can weep together, for the death of one of their members and for their own (Donne 1927). The journey to these sepulchers reflects the journey made by those who have died to the Underworld, and indicates a further relational interaction with the natural world, in that the sepulchers in mountainous regions represent a dialogue on death with the mountain itself.

The importance of kin and connectedness runs through Maori practices surrounding health, where family and community are integral to health with physical, mental and spiritual components (Mark and Lyons 2010). Studies of Maori ancestors prior to European contact indicate extreme dental wear, which may have occurred with diet alteration from large birds to marine resources (Kieser et al. 2001), as well as a renal calculus which likely arose from a urinary tract infection (Houghton 1975). The colonial process introduced diseases such as whooping cough, influenza, measles and bacillary dysentery. Lange (1999:19) suggests that the scattered nature of Maori settlements may have prevented a greater death toll from diseases brought with colonial forces.

Traditionally disease was considered more of moral quandary than necessarily a biological one–good *ora* or well-being comprised a condition of spiritual wholeness rather than simply good health (Lange 1999). *Ora* could be affected by an infringement on *tapu* (under religious or superstitious restriction [Donne 1927:74]). *Tapu* represents a type of taboo, restricting the physical touch by uninitiated persons of sepulchers, sacred places, possessions of the dead and most importantly, the head of the tribal chief (Oppenheim 1973:75). Shrunken heads of tribal chiefs were thus especially prized as objects of conquering and warfare, since the *tapu* would be broken through physical contact with the chief's head and certainly its physical transformation. Shrunken heads were sold to European settlers from 1770 onwards in exchange for firearms. This stands as a particular example of the interaction between ethnographic examples of disease spread and death customs amongst Maori communities.

Future directions for a holistic practice

One of the cornerstones of anthropology is its ability to reflect upon the epistemological assumptions built into the methodologies employed in our analyses. A medicalized discourse on death and disease is a necessary part of the type of research that biological anthropologists engage in and is part of the wider necessities for an objective analytical gaze. However, neither the dead nor those who have died from particular illnesses are isolated. They lived in social, economic, spiritual historical contexts that continue to be relevant to both them and to their families after their death. By recognizing the medicalized perspective that is a part of the pedagogical structures used in the training of biological anthropology students, it may be possible to balance this education with an exposure to relational ontologies and multidisciplinary instruction that include a more continuous interaction with those who have died. A holistic approach to examining the bones of indigenous ancestors makes a strong case for a continued four-field approach to anthropology (Cantwell 2000:110), one that does not isolate biological anthropology students from ethnographic sources or social anthropology students from an understanding of skeletal anatomy. This approach is not to sequester indigenous communities from changing cultural practices, as enshrining past ethnographies contributes to embodying the 'noble savage' (Ellingson 2001) in indigenous communities today. Zuckerman et al. (2014:517) propose a relational ethics system for bioarchaeology where 'researchers would explicitly engage in an ethics of social responsibility, wherein they would explicitly recognize that skeletons are not inert archives of information but are, symbolically, participants in the research process whose values and interests must be recognized'. This approach requires researchers to seek specific archaeological, historical and ethnographic information that can give a more holistic cultural and biological context to the interpretation of skeletal remains.

Biological anthropology remains a young discipline and there are still many more weaknesses in practice and methodologies that have yet to be identified. This is to encourage holistic perspectives on skeletal research–perspectives that actively acknowledge the place of a skeleton as more than just "…the mineral component of one body system" (Smith et al. 2011). Reflexivity is key in our empirical methods as scientists, as in an equal reflexivity in the assumptions we make about what constitutes a person in life and a person in death.

Acknowledgements

The author thanks Dr Brian Thom (Department of Anthropology, University of Victoria) for the opportunity to develop part of this paper and for his thoughtful discussion on its contents. The author also thanks the co-editors of this issue for their productive feedback and suggestions.

References

Aaby, P. 1984. Epidemics among Amerindians and Inuit: Those that existed at the end of the Pleistocene, a preliminary interpretation. In Brosted et al. (eds). *Native power: The quest for autonomy and nationhood of indigenous peoples*. Bergen: Universitetsforlage, 329–339.

An Ghaill, M.M. 2001. British critical theorists: the production of the conceptual invisibility of the Irish diaspora. *Social Identities* 7(2), 179–201.

Armelagos, G.J. and Van Gerven D.P. 2003. A century of skeletal biology and paleopathology: Contrasts, contradictions, and conflicts. *American Anthropologist* 105(1): 53–64.

Cantwell, A.M. 2000. "Who knows the power of his bones" reburial redux. *Annals of the New York Academy of Sciences* 925(1): 79–119.

Chahal, H.S., Stals, K., Unterländer, M., Balding, D.J., Thomas, M.G., Kumar, A.V. and Levy, M.J. 2011. AIP mutation in pituitary adenomas in the 18th century and today. *New England Journal of Medicine 364*(1): 43–50.

Cowan, J. 1910. *The Maoris of New Zealand*. Christchurch: Whitcombe and Tombs.

Crossland, Z. 2009. Of clues and signs: The dead body and its evidential traces. *American Anthropologist* 111(1): 69–80.

Cybulski, J.S. 1977. Cribra orbitalia, a possible sign of anemia in early historic native populations of the British Columbia coast. *American Journal of Physical Anthropology 47*(1): 31–39.

Cybulski, J.S. 1990. Human Biology. In Suttles, W. (ed.). *Handbook of North American Indians: Northwest Coast* Volume 7. Washington, DC: Smithsonian Institution, 52–59.

de Castro, E.V. 1998. Cosmological deixis and Amerindian perspectivism. *The Journal of the Royal Anthropological Institute* 4(3): 469–488.

Deloria, V. 1969. *Custer died for your sins: An Indian manifesto*. London: Macmillan.

Descola, P. 2009. Human natures. *Social Anthropology* 17(2): 145.

De Valck, C., Bensing, J., Bruynooghe, R. and Batenburg, V. 2001. Cure-oriented versus care-oriented attitudes in medicine. *Patient Education and Counseling 45*(2):119–126.

Donne, T.E. 1927. *The Maori: Past and present, an account of a highly attractive, intelligent people, their doubtful origin, their customs & ways of living, art, methods of warfare, hunting & other characteristics, mental & physical.* London: S. Service.

Doyal, L. and Muinzer, T. 2011. Should the skeleton of" the Irish giant" be buried at sea? *BMJ: British Medical Journal (Online)* 343.

Duran, B., Duran, E. and Brave Heart, M.Y.H. 1998. Native Americans and the trauma of history. In Thorton, R. (ed.). *Studying native America: Problems and perspectives.* Wisconsin: The University of Wisconsin Press, 60–76.

Ellingson, T. 2001. *The myth of the noble savage*. London: University of California Press Ltd.

Farmer, P. 1999. Pathologies of power: rethinking health and human rights. *American Journal of Public Health* 89(10):1486–1496.

Gaither, C.M. and Murphy, M. S. 2012. Consequences of conquest? The analysis and interpretation of subadult trauma at Puruchuco-Huaquerones, Peru. *Journal of Archaeological Science* 39(2): 467–478.

Glaskin, K. 2012. Anatomies of relatedness: Considering personhood in Aboriginal Australia. *American Anthropologist* 114(2): 297–308.

Goodman, A.H. (2000). Why genes don't count (for racial differences in health). *American Journal of Public Health* 90(11): 1699–1702.

Guilmet, G.M., Boyd, R.T. and Whited, D.L. 1991. The legacy of introduced disease: The southern Coast Salish. *American Indian and Culture Research Journal* 15(4): 2–32.

Hallam, E. 2010. Articulating bones: An epilogue. *Journal of Material Culture* 15(4): 465–492.

Highet, M.J. 2005. Body snatching & grave robbing: Bodies for science. *History and Anthropology* 16(4): 415–440.

Hill-Tout, C. 1978. *The Salish People: The local contribution of Charles Hill-Tout*. Vancouver: Talonbooks.

Houghton, P. 1975. A renal calculus from proto-historic New Zealand. *OSSA; International Journal of Skeletal Research 2*(1):11–14.

Joseph, S.E. 1994. *Coast Salish Perceptions of Death and Dying: An Ethnographic Study*. Unpublished MA dissertation submitted to the University of Victoria.

Kakaliouras, A.K. 2012. An anthropology of repatriation: Contemporary physical anthropological and Native American ontologies of practice. *Current Anthropology* 53: S210.

Kieser, J.A., Kelsen, A., Love, R. and Herbison, P.G.P., Dennison, K.J. 2001. Periapical lesions and dental wear in the early Maori. *International Journal of Osteoarchaeology* 11(4): 290–297.

Klaus, H.D. and Tam, M.E. 2009. Contact in the Andes: bioarchaeology of systemic stress in colonial Mórrope, Peru. *American Journal of Physical Anthropology* 138(3): 356–368.

Krmpotich, C. 2010. Remembering and repatriation: The production of kinship, memory and respect. *Journal of Material Culture* 15(2): 157–179.

Krmpotich, C., Fontein, J. and Harries J. 2010. The substance of bones: The emotive materiality and affective presence of human remains. *Journal of Material Culture* 15: 371–384.

Kuzawa, C.W. and Sweet, E. 2009. Epigenetics and the embodiment of race: Developmental origins of US racial disparities in cardiovascular health. *American Journal of Human Biology* 21(1): 2–15.

Lange, R. 1999. *May the people live: A history of Maori health development 1900–1920*. Auckland: Auckland University Press.

Larsen, C.S. 1994. In the wake of Columbus: Native population biology in the postcontact Americas. *American Journal of Physical Anthropology* 37(19 S): 109–154.

Mark, G.T. and Lyons, A.C. 2010. Maori healers' views on wellbeing: The importance of mind, body, spirit, family and land. *Social Science and Medicine* 70(11): 1756–1764.

Marrone, S. 2007. Understanding barriers to health care: A review of disparities in health care services among indigenous populations. *International Journal of Circumpolar Health* 66(3): 188–198.

McGhee, R. 1994. Disease and the Development of Inuit Culture. *Current Anthropology* 35(5): 565–594.

Merbs, C.F. 2004. Sagittal clefting of the body and other vertebral developmental errors in Canadian Inuit skeletons. *American Journal of Physical Anthropology* 123(3): 236–249.

Nguyen, V.K. and Peschard, K. 2003. Anthropology, inequality, and disease: A review. *Annual Review of Anthropology* 32(1): 447–474.

Oppenheim, R.S. 1973. *Maori Death Customs*. Wellington: A.H. & A.W. Reed.

Pullar, G.J. 1994. The Qikertarmiut and the Scientist: Fifty Years of Clashing World Views. In Bray, T.L. and Killion T.W. (eds). *Reckoning with The Dead: The Larsen Bay Repatriation and the Smithsonian Institution*. Washington: Smithsonian Institution Press, 15–26.

Rathbun, T.A. 1987. Health and disease at a South Carolina plantation: 1840–1870. *American Journal of Physical Anthropology* 74(2): 239–253.

Riding In, J. 1996. Repatriation: A Pawnee's perspective. *American Indian Quarterly* 20(2): 238–250.

Smith, M.S., Knüsel, C., Chamberlain, A. and Mitchell P.D. 2011. A response to Doyal and Muinzer "Should the skeleton of "the Irish giant" be buried at sea?". *British Medical Journal (Online)*, 343.

Springer, J.W. 2006. Scholarship Vs. repatriationism. *Academic Questions* 19(1): 6–36.

Stephenson, P.H. and Acheson, S. .2004. The Northwest Coast. In Ember C.R. and Ember, M. (eds). *Encyclopaedia of medical anthropology Volume 2: Cultures* New York: Kluwer Academic/Plenan Publications, 890–902.

Turner, N.J. and Hebda, R.J. 1990. Contemporary use of bark for medicine by two Salishan native elders of Southeast Vancouver Island, Canada. *Journal of Ethnopharmacology* 29(1): 59–72.

Van der Merwe, N.J., Williamson, R.F., Pfeiffer, S., Thomas, S.C. and Allegretto, K.O. 2003. The Moatfield ossuary: Isotopic dietary analysis of an Iroquoian community, using dental tissue. *Journal of Anthropological Archaeology* 22(3): 245–261.

Waldron, T. 2009. *Palaeopathology*. Cambridge: Cambridge University Press.

White,T.D. and Folkens, P.A. 2000. *Human Osteology*. London: Gulf Professional Publishing.

Williamson, R.F. and Pfeiffer, S. 2003. Bones of the ancestors: The archaeology and osteobiography of the Moatfield ossuary. *Archaeological Survey of Canada. Mercury Series Paper* 163.

Wood, J.W., Milner, G.R., Harpending, H.C. and Weiss, K.M. 1992. The osteological paradox: problems of inferring prehistoric health from skeletal samples. *Current anthropology* 33(4): 343–370.

Young, A. 1982. The anthropologies of illness and sickness. *Annual Review of Anthropology* 11(1982): 257–285.

Zuckerman, M.K., Kamnikar, K.R. and Mathena, S.A. 2014. Recovering the 'body politic': A relational ethics of meaning for bioarchaeology. *Cambridge Archaeological Journal* 24(3): 513–522.